

REMARKS

Claims 1 to 24 are all the claims pending in the application, prior to the present Amendment.

With respect to the Information Disclosure Statement filed on January 31, 2007, the Examiner states that it fails to comply with the rules for Information Disclosures Statements, and has been placed in the file, but has not been considered.

The Information Disclosure Statement of January 31, 2007 forwarded to the Examiner a copy of the Written Opinion, which can be found in “PAIR.” The references cited in the Written Opinion were previously submitted to the USPTO in the Information Disclosure Statement of September 25, 2006. Applicants submit the Examiner should have considered the Written Opinion and request her to do so.

Claims 1 and 20-21 have been rejected under 35 U.S.C. 102(b) as being anticipated by JP 09-309944 to Hirotaka (hereafter JP ‘944).

In addition, claims 23-24 have been rejected under 35 U.S.C. 103(a) as being unpatentable over JP ‘944.

In response, applicants have amended claim 1 to incorporate the recitations of claim 2. Since claim 2 has not been rejected over JP ‘944, applicants submit that each of the above rejections have been overcome and, accordingly, request their withdrawal.

Claims 1-22 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,964,999 to Nakagawa et al. Applicants note that the Examiner has not cited this patent on a form PTO-892. Applicants request the Examiner to include this patent on such a form.

As discussed above, applicants have amended claim 1 to incorporate the recitations of claim 2. In addition, applicants have amended claim 1 to recite that “a (meth)acryloyl group

exists at the molecular end.” Support for this amendment can be found at page 8, line 25 to page 9, line 2 of the present specification.

Applicants submit that Nakagawa et al do not disclose or render obvious the subject matter of the claims 1 and 3 to 22 and, accordingly, request withdrawal of this rejection.

The present invention as set forth in claim 1 as amended above is directed to a composition curable by radical photo curing and cationic photo curing in combination, comprising the components (A), (B), (C) and (D) as essential components. Component (A) is a vinyl polymer having two or more groups represented by general formula (1) per molecule, the group represented by general formula (1) being present at one or more molecular ends. Component (B) is an epoxy compound and/or an oxetane compound. Component (C) is a radical photopolymerization initiator, and component (D) is a cationic photopolymerization initiator. In the present invention the vinyl monomer constituting the main chain of component (A) comprises a (meth)acrylic monomer as a main component and a (meth)acryloyl group exists at the molecular end.

With respect to component (B) of the present claims, Nakagawa et al do not disclose the use of an oxetane compound. Further, Nakagawa et al do not disclose an example where an epoxy compound is employed, and thus do not disclose or suggest the use of all four of the components (A) to (D) of the present claims in combination.

Comparative Example 1 of the present specification shows what happens when a component (B) epoxy compound is not present. The evidence in Comparative Example 1 as compared to Example 1 establishes the present invention achieves unexpected results as compared to Nakagawa et al and thus is unobvious over Nakagawa et al.

Further, applicants enclose a copy of an executed Declaration Under 37 C.F.R. § 1.132 to further establish and prove the surprising and unexpected results of the present invention as compared with Nakagawa et al. Although Comparative Example 1 of the present application is identical to Example 9 of Nakagawa et al except for the addition of an antioxidant in Comparative Example 1 (Irganox 1010), applicants have examined the mechanical properties of the cured article corresponding to that in Example 9 of Nakagawa et al in order to prove that the low viscosity of the composition and improved mechanical properties of the cured article of the present invention are surprising and unexpected results as compared with those of Nakagawa et al. The enclosed Declaration clearly shows that the surprising and unexpected results of the present invention are obtained by employing an epoxy compound together with applying ultraviolet curing.

Thus, Nakagawa et al do not disclose or teach a composition in which all the components (A) to (D) are employed in combination, and do not disclose or suggest the surprising and unexpected results that are shown in the Declaration, which establish that the present invention is patentable over the disclosure of Nakagawa et al.

In view of the above, applicants submit that Nakagawa et al do not disclose or render obvious the subject matter of the claims 1 and 3 to 22 and, accordingly, request withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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